ABSTRACT

Ensuring that a tunable device, such as a tunable optical filter, accurately tracks the wavelength of a local oscillator signal involves generating at least one synchronization signal as the local oscillator signal is swept across a range of wavelengths and adjusting an operating characteristic of the tunable device in response to the at least one synchronization signal. Before the local oscillator signal is swept across the range of wavelengths, the operating characteristic of the tunable device and the wavelength of the local oscillator signal are initially set to matching values.